

PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)	
		5649-1216	
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		10/806,903	03/23/04
		First Named Inventor	
		Hyunwoo Cho	
		Art Unit	Examiner
		2617	Joel Ajayi
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.			
This request is being filed with a notice of appeal.			
The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the		<u>D. Randal Ayers</u> Signature	
<input type="checkbox"/>	applicant/inventor.	D. Randal Ayers Typed or printed name	
<input type="checkbox"/>	assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)	919-854-1400 Telephone number	
<input checked="" type="checkbox"/>	attorney or agent of record. Registration number <u>40,493</u>	December 2, 2008 Date	
<input type="checkbox"/>	attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____		
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
<input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**RESPONSE UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2617**

Attorney Docket No. 5649-1216

PATENT

In re: Hyunwoo Cho et al.

Serial No.: 10/806,903

Filed: March 23, 2004

For: *Wireless Terminals Supporting Communications with an Access Point Over Separate
Wireless Channels and Related Wireless Systems*

Confirmation No.: 2404

Group Art Unit: 2617

Examiner: Joel Ajayi

Date: December 2, 2008

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Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

**REASONS IN SUPPORT OF APPLICANTS'
PRE-APPEAL BRIEF REQUEST FOR REVIEW**

This paper is submitted in support of the Pre-Appeal Brief Request for Review filed concurrently with a Notice of Appeal in compliance with 37 C.F.R. 41.31 and the rules set out in the OG of July 12, 2005 in order to request a Pre-Appeal Brief Review of the final rejections of pending Claims 1, 3-8, 10-33 and 35-37. If any additional fee or extension of time for this request is required, this may be considered a petition therefore, and any additional fees may be charged, or refunds credited, to our Deposit Account No. 50-0220.

I. Claims 1, 3-8, 10-13 and 37

Claims 1, 3-8, 10-13 and 37 stand rejected under 35 U.S.C. § 103 as being obvious over U.S. Patent Publication No. 2002/0173277 ("Takao") in view of U.S. Patent Publication No. 2002/0025810 ("Takayama") and, in the case of Claims 4, 8 and 37, further in view of an additional secondary reference. Applicants respectfully traverse these rejections.

Claim 1 recites, among other things, a "control unit that is responsive to the data processor." The Final Action states that the switching controller 34 of Takao comprises the "control unit" of Claim 1 and that the signal processing unit 33 of Takao comprises the "data processing unit" of Claim 1. (Final Action at 5). However, Takao simply does not teach that the switching controller 34 is responsive to the signal processing unit 33. Instead, Takao includes two express teachings that the switching controller 34 is not responsive to the signal processing unit 33 as is required by Claim 1:

1. FIG. 10 of Takao shows that there is no connection between the switching controller 34 and signal processing unit 33, showing that the switching controller 34 is not responsive to the signal processing unit 33.

2. The specification expressly states that "the switching controllers **53** and **34** switch the communication mode of the system based on the control signal from the signal processing unit 50 of the base station." (Takao at ¶ 0067).

Thus, Takao teaches that the "switching controller **34**" is responsive solely to control signals sent from the base station **10₁**. As such, Takao fails to disclose a control unit that is responsive to the data processor of the wireless terminal as is recited in Claim 1.

The Final Action argues that Takao teaches that "the processing unit has to process the signal(s) received from the base station in order for the synchronization and switching of the communications modes to take place." (Final Action at 2). However, the cited portions of Takao fail to provide any support for this assertion. Additionally, paragraph 67 and FIG. 10 of Takao directly contradict this assertion by teaching that the switching controller **34** is controlled by the base station **10₁**, and that no connection is even provided between switching controller **34** and signal processing unit **33**. Accordingly, the rejection of Claim 1 should be withdrawn as the cited art fails to disclose a "control unit that is responsive to the data processor" as is recited in Claim 1.

Claims 3-8, 10-13 and 37 are patentable as depending from a patentable base claim. In addition, at least Claims 3-4, 8 and 12-13 are independently patentable over the cited art.

Claims 3-4 each recite "a traffic control unit that is responsive to the data processor." The Final Action states that the "switching controller . . . is responsive to the data processor." However, as shown above, the switching controller **34** of Takao is not responsive to the signal processing unit **33**, and hence Claims 3-4 are independently patentable.

Claim 8 recites that the first channel is implemented as an orthogonal frequency division multiplexing (OFDM) channel and that the second channel is implemented as a direct sequence spread spectrum (DSSS) communications channel. The Final Action states that U.S. Patent Publication No. 2002/0062472 ("Medlock") discloses the recitations of Claim 8. Applicants disagree. The cited portion of Medlock merely states that the invention described therein may be implemented in a wide variety of communications systems, including DSSS and OFDM systems. It does not teach or suggest using both an OFDM channel and DSSS channel in the same system as is recited in Claim 8.

Claim 12 recites that "the first and second communications channel are implemented using different multiple access techniques." The Final Action states that paragraphs 27-28 of Takao disclose the recitations of Claim 12. However, paragraph 0027 simply discusses

problems with various prior art access techniques, while paragraph 0028 merely states that it is an object of the invention of Takao to "realize an efficient use of the radio frequency resources." Accordingly, Claim 12 is also independently patentable over the cited art.

Claim 13 recites that the first and second communications channels are "implemented according to different versions of the 802.11 standard." The Final Action states that IEEE 802.11 refers to a family of standards, and that therefore Takayama discloses the recitations of Claim 13. Applicants disagree. There is no teaching or suggestion in Takayama of implementing the first and second communications channels according to different versions of the 802.11 standard. As such, Claim 13 is also independently patentable over the cited art.

II. Claims 14-25 Are Patentable Over the Cited Art

Claim 14-25 stand rejected as being obvious over Takao in view of U.S. Patent Publication No. 2004/0073361 ("Tzamaloukas") and, in the case of Claims 19-21 and 23, based on an additional secondary reference. Applicants also traverse these rejections.

In rejecting Claim 14, the Final Action states that paragraphs 0005 and 0029 of Takao disclose a first communications channel that transmits data associated with a first application and a second communications channel that transmits data associated with a second application as recited in the last two clauses of Claim 14. (Final Action at 7-8). However, the cited portions of Takao do not discuss first and second applications that are running on the wireless terminal, and neither reference discloses or suggests using a first channel for transmitting data associated with a first application while using a second channel for transmitting data associated with a second application as is recited in Claim 14. Accordingly, the cited art does not render Claim 14 obvious for at least this reason.

The Response to Arguments section of the Office Action asserts a new argument, namely that Takao discloses transmitting data such as a homepage on the downlink while transmitting control information on the uplink. (Final Action at 4). However, Claim 15 – which recites that "the second communications channel is further used to transmit control information associated with the first application" – makes clear that such "control information" does not comprise the "data associated with the second application" that is recited in Claim 14.

Claims 15-25 are patentable as depending from a patentable base claim. Claims 15 and 23 are also independently patentable over the cited art. In particular, Claim 15 recites

that "the second communications channel is further used to transmit control information associated with the first application from the wireless terminal to the access point." Neither cited reference teaches the recitation of Claim 15, and hence Claim 15 is independently patentable over the cited art. Claim 23 adds the same recitation added by Claim 8, and stands rejected based on the same grounds. Accordingly, Claim 23 is independently patentable over the cited art for the same reason, discussed above, that Claim 8 is independently patentable.

III. Claims 26-32 Are Patentable Over the Cited Art

Claims 26-32 stand rejected as being unpatentable under 35 U.S.C. § 103(a) over U.S. Patent Publication No. 2002/0006120 ("Suzuki") in view of U.S. Patent No. 7,274,652 ("Webster"). Applicants likewise submit that Claims 26-32 are patentable over the cited art.

In particular, Claim 26 recites that "the first and second communications channels are implemented using different multiple access techniques." The Final Action cites to Col. 7, lines 35-46 and Col. 13, lines 42-62 of Webster as disclosing this recitation of Claim 26. Applicants respectfully submit, however, that the cited portions of Webster disclose a "dual" packet configuration that has first and second portions that may be understood by devices operating under two different 802.11 protocols. As explained at Col. 13, lines 42-62, the first portion of the packet can be understood by 802.11b devices so that these devices will know how long to "back off" during communication of the remainder of the packet. The second portion of the packet is then received by 802.11a devices. Thus, the dual packet configuration allows 802.11b and 802.11a devices to "coexist in the same communications area" while allowing the 802.11a devices to communicate at higher data rates.

Webster thus does not disclose implementing first and second communications channels using different multiple access techniques between an access point and a single wireless terminal as is recited in Claim 26. Instead, Webster describes packets that include a first portion that is received by a first terminal and a second portion that is received by a second terminal. Thus, while Webster discusses two different access techniques, it uses these access techniques to communicate with two different terminals instead of using two different access techniques to communicate with the same terminal as is recited in Claim 26. As such, Claim 26 is patentable for at least this reason.

Claims 27-32 are patentable as depending from a patentable base claim. Claim 27 is also independently patentable over the cited references, as nothing in either reference teaches

transmitting data associated with a first application over both first and second channels between an access point and a single wireless terminal as is recited in Claim 27.

IV. Claims 33 and 35-36 Are Patentable Over the Cited Art

Claims 33, 35 and 36 likewise stand rejected as being unpatentable under 35 U.S.C. § 103(a) over Suzuki in view of Webster. Applicants respectfully traverse these rejections.

In particular, Claim 33 recites, *inter alia*, a plurality of wireless channels that "operates in different frequency bands." The Final Action cites to Col. 1, lines 15-24 and Col. 13, lines 42-62 as disclosing this recitation of Claim 33. However, as is discussed above with respect to the rejection of Claim 26, the cited portions of Webster discuss using two different access techniques to communicate with two different terminals, whereas Claim 33 recites providing a plurality of wireless channels between an access point and a single wireless terminal, where the channels operate in different frequency bands and have different throughputs. Thus, Claim 33 is patentable over the cited art for at least this reason.

Claims 35-36 are patentable as depending from a patentable base claim. Applicants also submit that Claim 35 is independently patentable over the cited references, as nothing in either reference teaches using OFDM on a first channel to a wireless terminal while using DSSS on a second channel to the same wireless terminal as is recited in Claim 35.

Respectfully submitted,



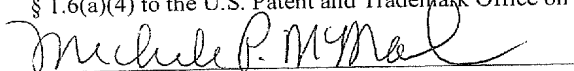
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CERTIFICATION OF TRANSMISSION

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